

ABSTRACT

Provided is a device comprising a plurality of microchambers having a closed vented environment, wherein each microchamber is in operative communication with a filling port and a vent aperture. The device further comprises a base which is sandwiched between two liquid-impermeable membranes, with at least one of the membranes being gas permeable. Also provided is a method for introducing a fluid into a plurality of microchambers of the device, wherein each filling port is aligned with a pipette tip, and the fluid is introduced into and through the filling port. The fluid then flows along a fluid flow groove providing fluid flow communication between the filling port and the microchamber, and into the microchamber.